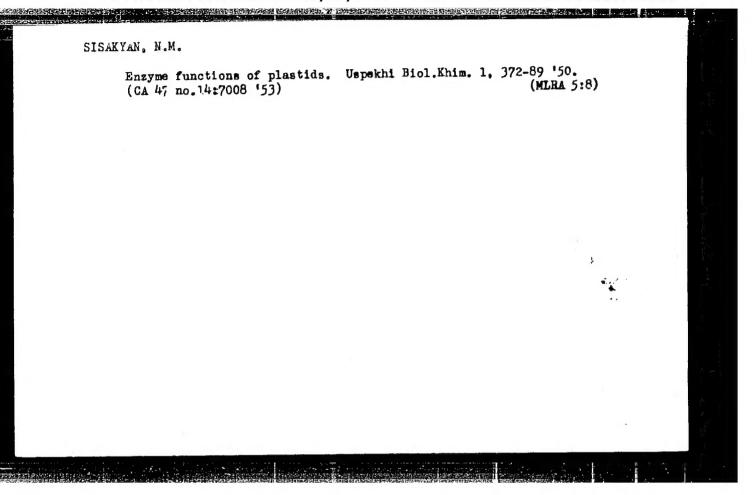
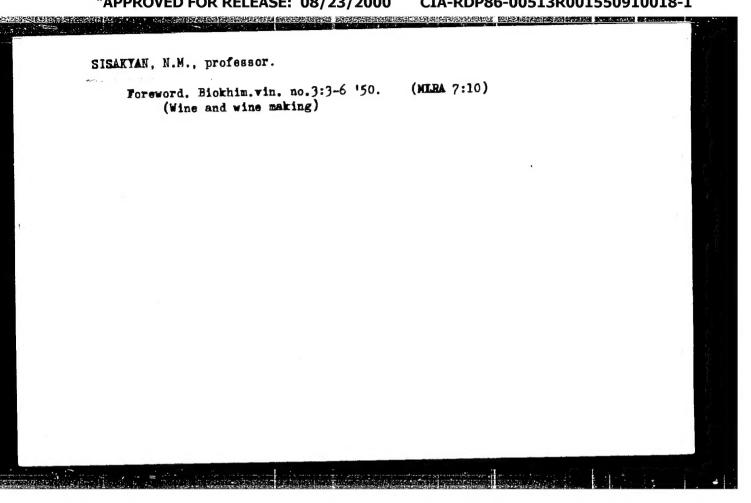


SISARYM, N. M.

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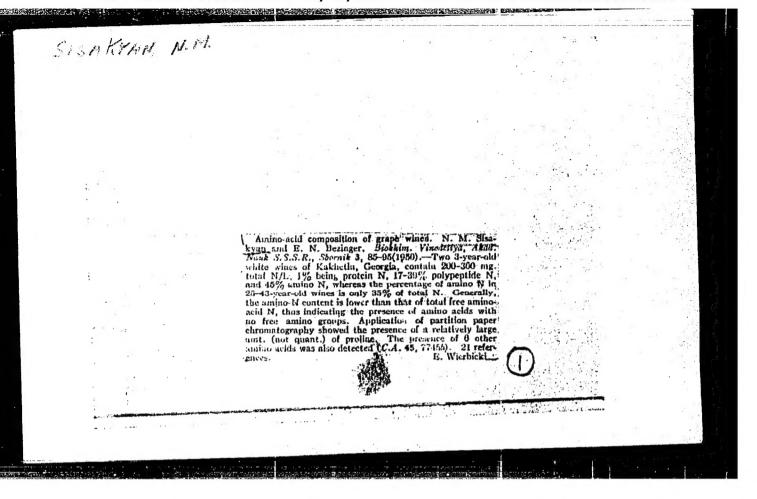


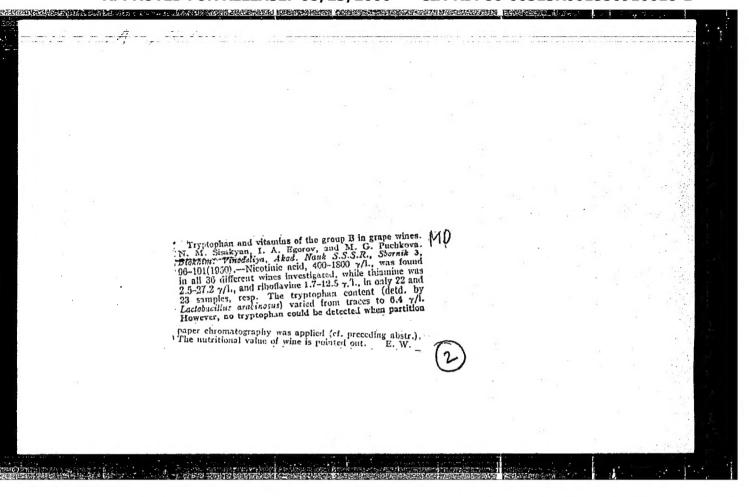


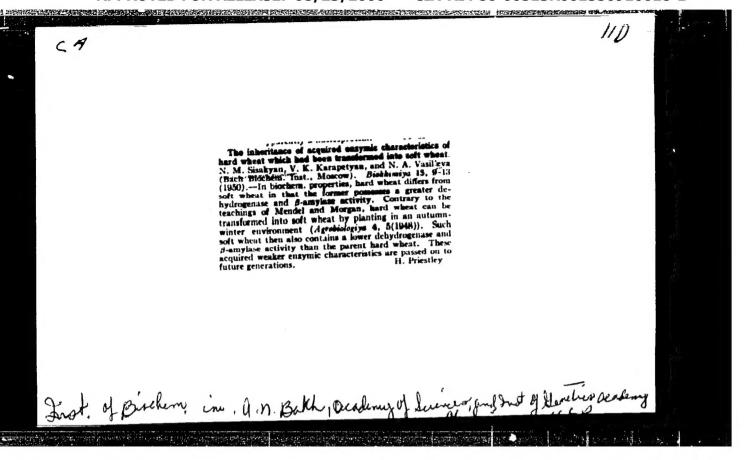
SISAKYAN, N.M.; YEGOROV, I.A.; SAAKYAN, R.G.

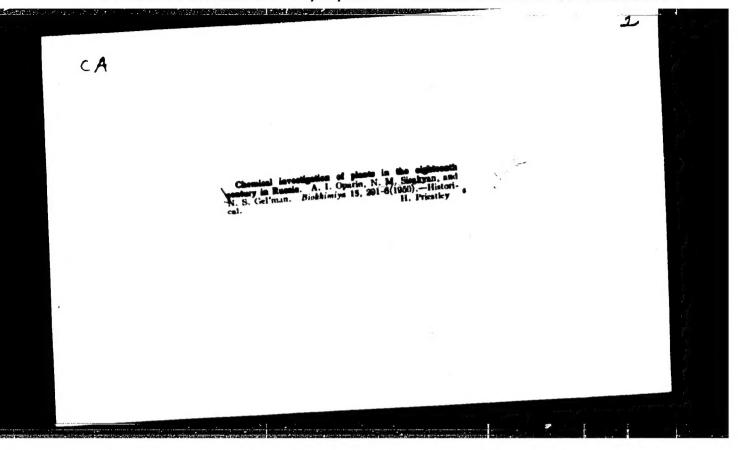
Intensity of biochemical reactions in the sherry process. Biokhim. vin. no.3:57-68 '50. (MIRA 7:10)

 Institut biokhimii imeni A.N.Bakha. 2. Institut vinodeliya i vinogradarstva AH Armyanskoy SSR. (Sherry)









Nature of amine acid action on the synthesis of sucress in the living plant coil. N. M. Shakyan, N. A. Vasil'era, and T. V. Syrapones (librah illucturii. Inst. Mackey, M. A. Vasil'era, and T. V. Syrapones (librah illucturii. Inst. Mackey, M. A. Vasil'era, and T. V. Syrapones (librah illucturii. Inst. Mackey, M. A. Vasil'era, and T. V. Syrapones (librah illucturii). Inst. Mackey, M. A. Vasil'era, and T. V. Syrapones (librah illucturii). Inst. Mackey, M. A. Vasil'era, and T. V. Syrapones (librah illucturii). Inst. Mackey, M. A. Vasil'era, and the state of the

SISAKYAN, N. A.

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Chemical Abstracts Vol. 48 No. 5 Mar. 10, 1954 Stological Chemistry The nature of the station of amino acids on sucrose synthesis in the living stant call. N. M. Sisakyah, N. A. Vasikeva, and T. Vi Stepanova (Acad. Sci. U.S.S.R., Moscow) P. Ukrasi. Biokhim Zhur., 13, 471-80(1950) (in Russian); cf. C.A. 45, 1652d.—In the leaf blades of 7-day-old germinated wheat, enzymic sucrose formation and the adsorbability of invertase were detd. by the method of Kursanov (C.A. 41, 501k), and respiration was studied in a Warburg app. For study of enzymic synthesis the amino acids were simultaneously introduced with invert sugar solution of their action upon adsorption or respiration, an aquesolution of the amino acids was introduced by vacuum infiltration. Sucrose synthesis is activated by glycine, alanine, L- and DL-tryptophan, L-cysteine, DL-phenylalanine, DL-histidine, DL-methionine, DL-aspartic acid, and DL-arginine; no effect upon sucrose synthesis is shown-by DL-valine, L- and DL-leucine, DL-norleucine, DL-isoleucine and DL-lysine. The introduction of amino acids into plant tissues incites complementary respiration, which serves as a source of indispensable energy for synthetic reactions and for adsorption of enzymes. The adsorption of enzymes, e.g. invertase, leads to addnl. enzymic sucrose formation as the result of removal of hydrolyzing agents from the medium. Thiamine increases respiration by 25% and sucrose synthesis by 75%; KCN (a respiration inhibitor) and compds. of heavy metals (depressors of the respiratory system), and sodum diethylthiourea (which inhibits polyphenoloxidase) do not depress synthesis of sucrose; AgNO₃ (an inhibitor for the flavoprotein enzyme systems) completely inhibits O₃ absorption, greatly depresses respiration, and completely inhibits sucrose synthesis.

Clem (3)

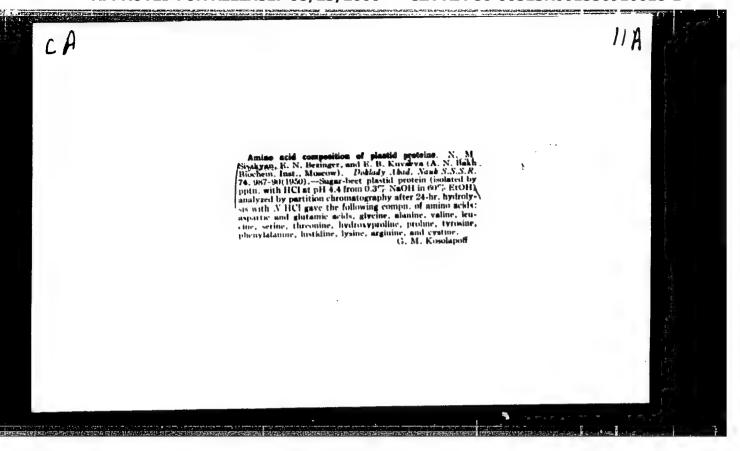
Cathy Ang and Then Kov., 1. Ya.

USSR/Biology---Plants, Hybrid Phosphorus Exchange

"Exchan e of Redioactive Phosphorus between the Graft and Wilding of a Horid Plant," Inst of Diocem imini A.M. Bakh, Ac.d Sci USSRm3pp.

Dok Ak Nauk SSSR" vol. LXX, No2. 1,50.

Used isotopic method to study exchange of radio-active phosphorus between graft and mother plant in accordance with Michurin(s principles. Shows phoshorus exchange is much more intensive in tissues and organs which are "physiologically" young. There is irregular prospectus exchange between graft and wilding. Proves Michurin's conception of related exchange of material between graft and mother plant in vegetative hybridication. Submitted b Acad A.I. Oparin 17 Nov. 1949.



SISAKYAND, N. H.

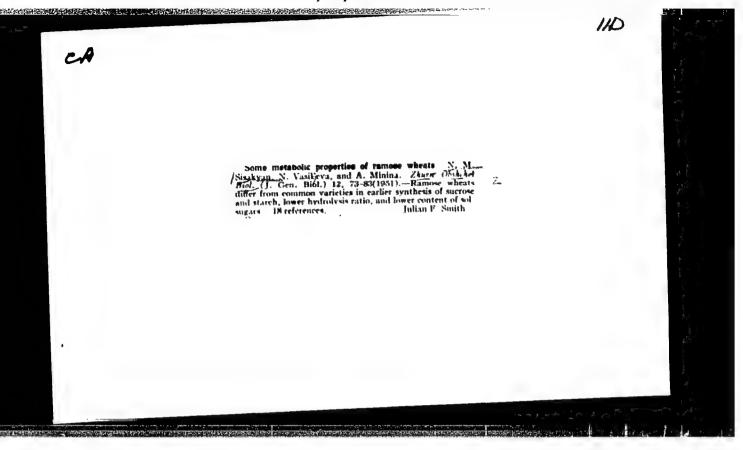
Science

Methods of determining vitamins; collection of articles on vitamins in biochemistry and physiology, Pod red N. M. Sisokiana i dr. Sb. 4). Moskva, Izd. inostr. lit. 1951.

9. Monthly List of Russian Accessions, Library of Congress, December 1957, Uncl.

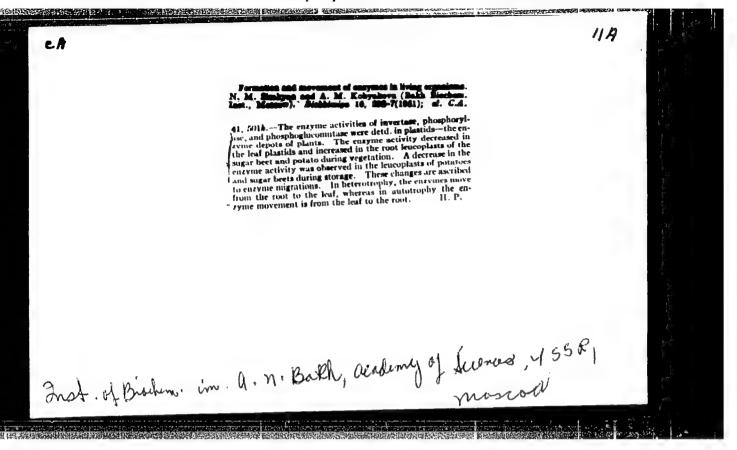
STSAKYAN, N. M.
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Fermentative activity of protoplasmic organisms. (Moskva), AN SSSR, 1951.

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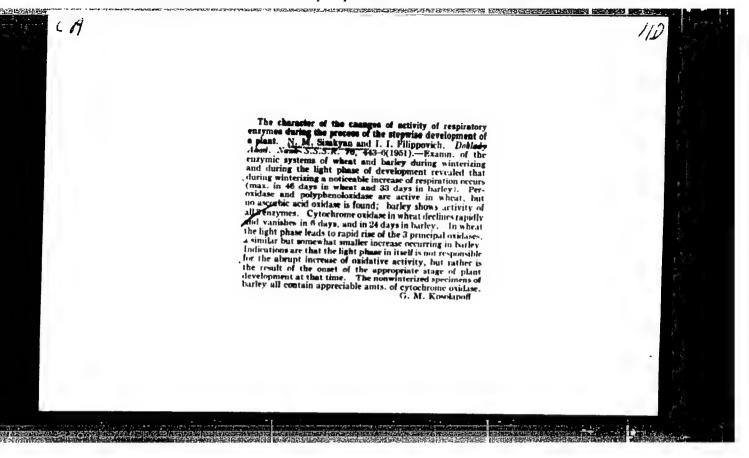
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SISAKYAN, N.M.; BIRYUZOVA, V.I.; KOBYAKOVA, A.M.

Changes in structure and enzymic activity of plastids in the ontogenetic development of the plant. Biokhimiya '51, 16, 449-452. (MLRA 4:10) (BA -AIII My '53:726)



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The nature of the substances which are formed during the process of aging wine brandles. N. M. Slankyan and I. A. Egorov. Doklady Akad. New 8-18-18-19, 630-42 (1951); Chem. Zentr. 1952, 1585; cf. C.A. 42, 9069a; 48. 12369b.—High-quality wine brandy shows strong absorption in the ultraviolet, with a characteristic max. at 275-80 mµ. The substance responsible for this absorption is quantilatively adsorbed by activated C and can be exidiform the latter with ether. The substance isolated therefrom by sublimation was identified as vanillin. Since the latter is not present in unaged brandy, it must pass into the hrandy from the wood of the oak cask during aging. Exins. with benzene, alc., and ether showed that a substance was present in oak wood which gave an absorption max. at 275-80 mµ. The specific aroma of the brandy, however, is regarded as the result of the interaction of this substance with other substances and alc. already present in the brandy. M. G. Moore

SISAKYAN, N M .R92993

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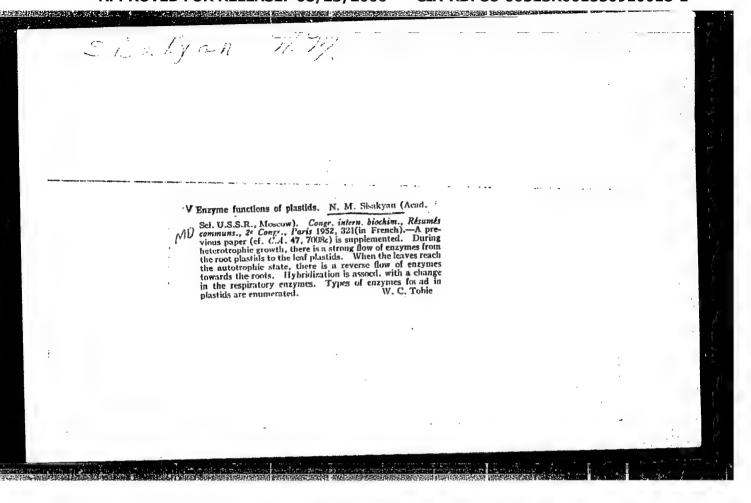
MCGKVA, IZD-VO ZNANIYE, 1952.

30 P. TABLE (VSLSOYUZNOYE CESHCHISTVO PO RASPROGRAMENTYU POLITICHESKIKH I MAUCH-

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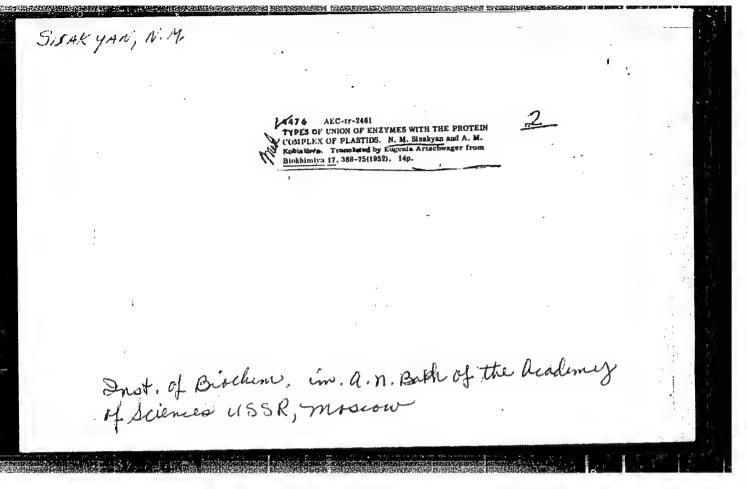
RUSSIA



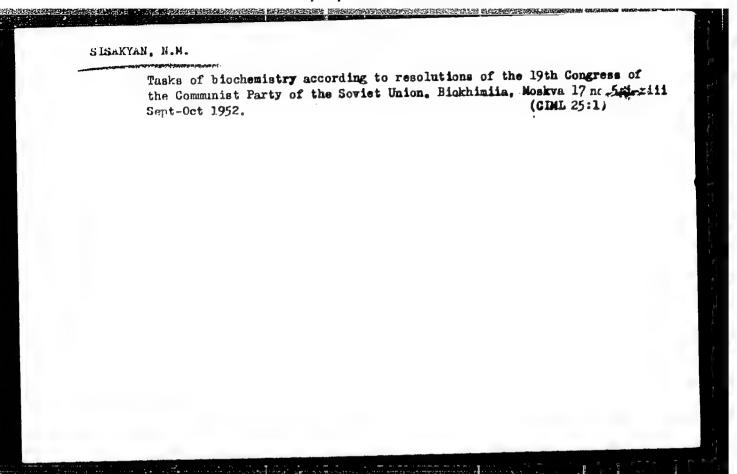
OPARIN, A.I.; SISAKYAN, N.M.; OEL'MAN, N.S.

Centribution to the history of plant biochemistry in the U.S.S.R. Trudy
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Inst.ist.est. 4:236-266 '52.

(Botanical chemistry)



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Resistance of vitamin C in preserved dehydrated vegetables and potatoes.

Biokhimiia, Moskva 17 no.6:701-703 Nov-Dec 1952. (CIML 25:1)

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- 1. SISAKYAN, M. M., Prof.
- 2. USSR (600)
- 4. Enzymes
- 7. Problems of enzymology. Vest. AN SSSR 22 No. 8, 1952.

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Nucleic acids in plastids. Doklady Akad. nauk SSSR 87 no. 3:469-470 (CIML 23:5)

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SISAKYAN, N.M., chlen-korrespondent.

[Metabolism in plants] Obmen veshchestv v rastitel'nom organisme. Moskva.

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(Flants-Metabolism)

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SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

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USSF/C_emistry - International Congress

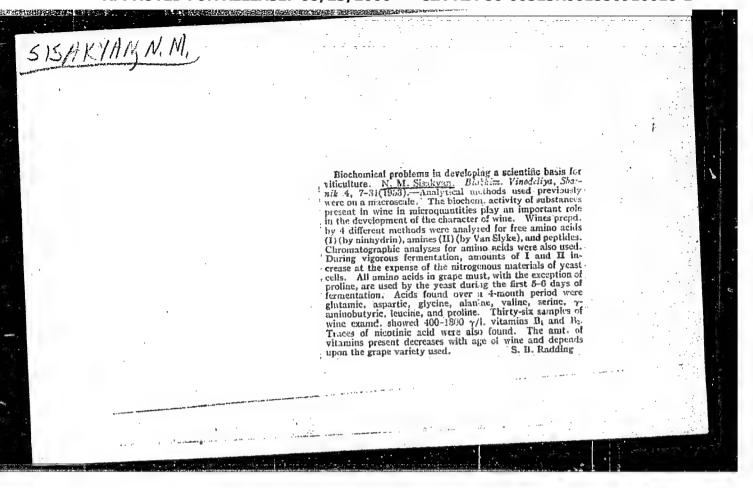
Jan 53

"Second Biochemical Congress in Paris" Fy V. A. Engelgardt, Corr Mem Acad Sci and V. N. Pukin, Frofessor.

Vest At nauk, SSSR, No 1, 1953, pp 75-77

Second Eiochemical Congress was held in Paris in 1952. The following Soviet scientists were in the Soviet delegation: Acad A. I. Oparin (Leader of the delegation), Corr Mem ACAD Sci V. A. Engel'gardt, Prof A. N. Belozerskiy, V. N. Bukin, V. N. Butrov, V. N. Orekhowich. Following Russian Papers were read: By Oparin "The Change of Action of Enzymes in Plant Cells under the influence of external effects", by Orekhovich "Procollagens, their chemical compositions, properties and biological role", Orekhovich "Procollagens, their chemical compositions, properties and biological role", by Engel'gardt "The Enzymology of Myosin", by Belozeroskiy "The Antigen fractions of bacteria of the intestinal group", by Bukin "Proteid Compounds of fat-soluble vitamins." Also 3 papers of scientists who did not attend: by Acad A. V. Palladin "Research on the Eiochemistry of the Cerebrum", by Corr MemAcad Sci Kh. S. Koshtoyants "The role of the active groups of Protein substances in the Process of Nerve Regulation" and by Dr Biel Sci N. M. Sisakyan "The Enzymatic Function of Plastids".

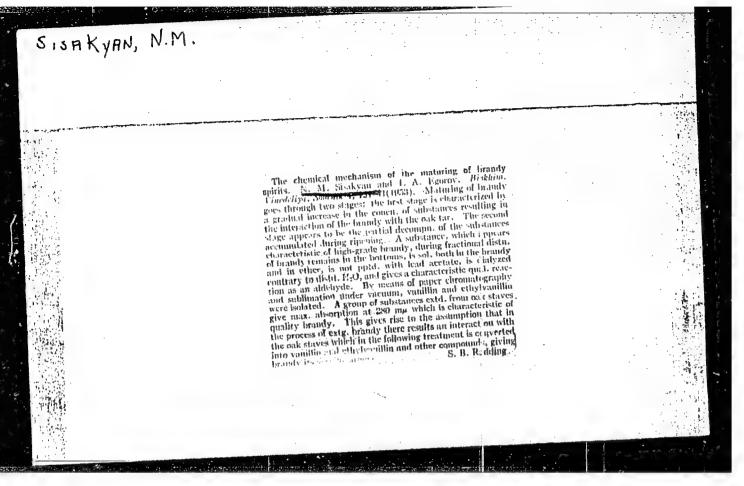
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Physioblochemical features of the development of sherry film and its use in production. N. M. Sisakyan, E. M. Popova, N. F. Saenko, M. A. Gerasimov, and M. G. Puchkova. Biakhim. Vimeliya, Sbernik 4, 32-55(1953).—Investigation of biochem, processes of viniculture shows that there is a decrease in the wine of the vitamins of group B, suggesting that the vitamins are used by the yeast cells in the nature of an addnl. factor of nutrition. Previous observations have shown that the microfranisms of yeast are capable of absorbing vitamins from the surrounding media. Studies were made of (1) microbiol, observations on the lutensity of growth and the development of sherry film and its morphological changes at the time of processing wine nitrogenous and bioactive substances; and (2) the biochem, and chem, processes underlying sherry formation. Results of the first tests show that the most favorable conditions for the development of the film is displayed by the mediums in which there has been the addn. of 0.5% yeast autolysis processed at a temp. of -180°, 120 mg./l. ammonia N, and 0.4 mg./l. ribodavine. The amts, of aldehydes, and specifically acetal, are considerably increased in comparison with the control. A second set of tests was perfected to climinate the necessity of the -180° temp. Wiles were treated at -180°, -40°, -10° (with a 5-fold wiles were treated at -180°, -40°, -10° (with a 5-fold wiles were treated at -180°, -40°, -10° (with a 5-fold wiles).

freezing and thaving technique); and holding at 48° for 48; hrs. Yeast in the control sample and in the heated sample generated very slowly. The best activity was noted with 7-180° treatment with the activity decreasing with an Increase in temp. After the treatment a rapid increase in the activity of estense and peroxidase is noted. After presidentially about 10 mg, 10 m



SISAKYAN, N.M.; FILIPPOVICH, I.I.

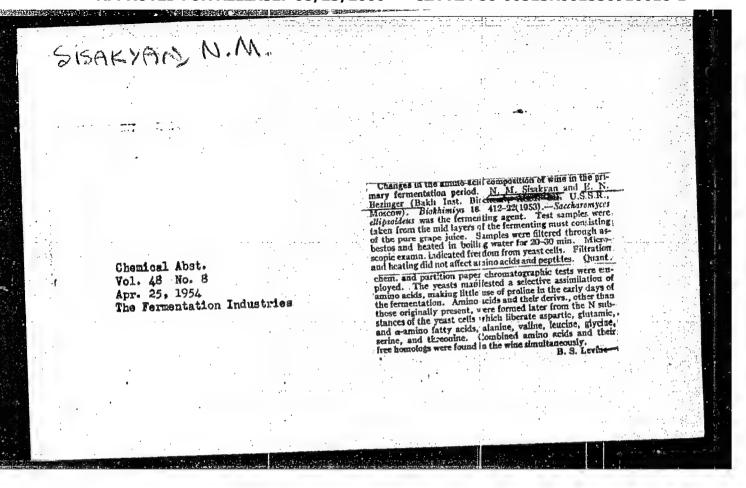
Character of metabolism in phasic development of the organism. Zhur.ob.
(MLRA 6:6)
biol. 14 no.3:215-228 My-Je '53.

(Plants--Metabolism) (Growth (Plants))

SISAKYAN, N.M.; KUVAYEVA, Ye.B.

Metabolism of cavernous fluids of the silkworm in the process of methamorphosis. Biokhimiia 18 no.3:354-362 My-Je 153. (MLRA 6:7)

1. Institut biokhimii im. A.N. Bakha AN SSSR, Moskva. (Silkworms)



SISAKYAN, H.M., professor, chlen-korrespondent [redaktor]; PROSTOSERBOV, N.N.

"Biochemistry of wine making." N.M.Sisakian, ed. Reviewed by N.N.Prostoserdov.

(MLRA 6:10)

Biokhimila 18 no.5:654-656 S-0 '53.

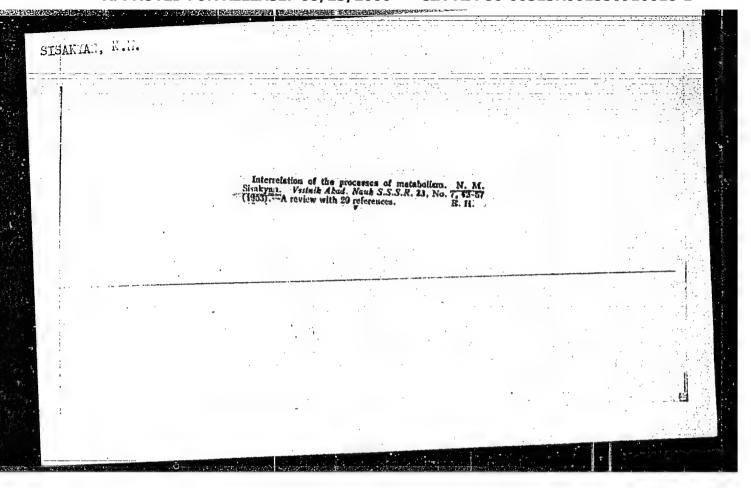
1. Akademiya nauk Armyanskoy SSR (for Sisakyan).

(Wine and wine making) (Sisakian, H.M.)

SISAKYAN, N.M.; KRASNOVSKIY, A.A.; MIKHAYLOVA, Ye.S.; BRIN, G.P.

Interrelation of photochemical capacity and enzymatic processes. Biokhimiia (MIRA 6:12)
18 no.6:725-731 N-D '53.

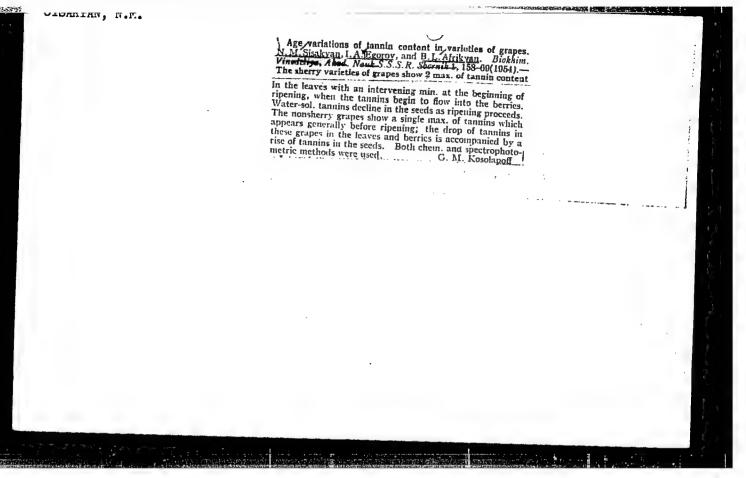
1. Institut biokhimii im.A.N.Bakha Akademii nauk SSSR, Moscow. (Photosynthesis) (Enzymes)



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Change of the semine sold content of proteins of plastidate the process of our A. Organism. N. M. Stavious Change of the semine sold content of proteins of plastidate the process of our A. Organism. N. M. Stavious Change of the semine sold N. A. Comievakova, T. Dellar, J. Content of the process of our N. A. Comievakova, T. Dellar, J. Content of the process of our N. The protein (1), an 18th one is reported. A protein was isolated similar to the protein soluted. A protein was soluted similar to the protein (1), an 18th one is reported best-leaf chicroplasts; this contained similar to the protein soluted. A protein was soluted similar to the protein soluted by popts, of an 18th organism least arginine, leaving and solution of the protein soluted in 18th organism of the protein soluted in 18th organism solution in 18th organism of the protein solution of the pr

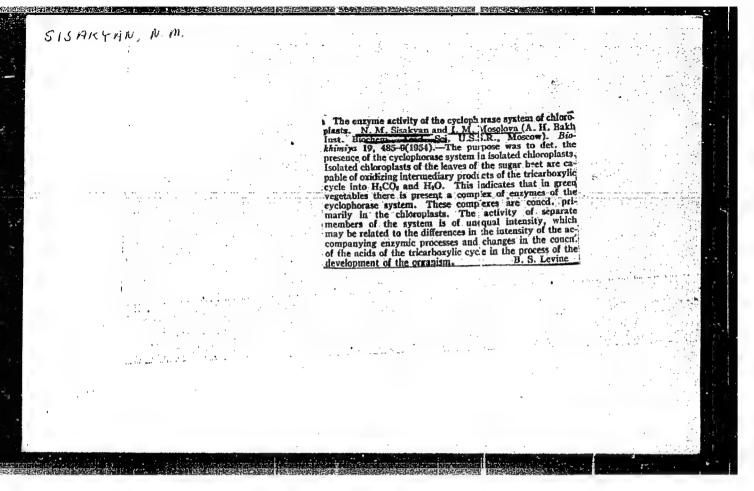


OPARIN, A.I.; SISAKTAN, N.H.; KURSNAOV, A.A.; SEVERIN, S.Ye.

Viadimir Aleksandrovich Engel'gardt; on his 60th birthday. Izv. AN

SSSR. Ser. bitl. no.6:125-126 N-D '54. (MLRA 3:3)

(ENGEL'GARDT, VIADIMIR ALEKSANIROVICH, 1894-)



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CIA-RDP86-00513R001550910018-1

USSR."

Distation-roduction processes in hard and soft wheat.

M. M. Shabyan and N. A. Vasil'eva (A. N. Bakh Inst. Biodismit Today Sci. U.S.S.R., Moscow). Biokhimiya 19.

730-7(1954). Bernation and oxidation-reduction processes are enhanced and soft wheat in the germination as auge, the levels of than soft wheat in the germination as auge, the levels of the soft of the soft of the fransport of H. After 24 hrs. the part played by the fransport of H. After 24 hrs. the part played by the fransport of H. After 24 hrs. the part played by the fransport of H. After 24 hrs. the part played by the fransport of H. After 24 hrs. the part played by the fransport of H. After 24 hrs. the part played by the fransport of H. After 24 hrs. the part played by the fransport of H. After 24 hrs. the part played by the fransport of the fransport of H. After 24 hrs. the part played fransport of the fr

SISAKYAN, N.M.

Principal results of the scientific activity of the Academy of Sciences of the U.S.S.R. during 1953. Vest.AN SSSR 2½ no.3:23-42 Mr '54. (MIRA 7:3)

1. Chlen-korrespondent Akademii nauk SSSR. (Academy of Sciences of the U.S.S.R.) (Science)

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SISAMMAN, N. M. USSR/Biochemistry

Card 1/1

Authors

: Sisakyan, N. M; Bezinger, E. N; Carkavi, P. G., and Kivman, G. Ya.

Title

Simple method determining amino-acids through chromatographic analysis on paper.

: Dok1. AN SSSR, 96, Ed. 2, 343 - 346, May 1954

Abstract

Periodical

Determination of amino-acids is carried out by a two-dimensional chromatographic method. The initial process of separation is accomplished with the aid of methyl alcohol - water - pyridine (40:10:2) and the second and final process with n-butyl alcohol - methylethylketone - water - diethylamine (20:20:10:2). The solvents require no preliminary purification. The appearance of amino-acid on the paper is attained by treating the latter in a 0.4-% ninhydrin solution in methyl alcohol, in acetone or n-butyl alcohol. One reference. Table, photos.

Institution

Acad. of Scs. USSR, The A. N. Bakh Inst. of Biochemistry and the State Control Inst. of Serums and Vaccines at the Ministry of Health USSR.

Submitted

: March 13, 1954

SisAKYAN, N. M.

USSR/Biology

Biochemistry

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Card

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Authors

Sisakyan, N. M., Memb. Corresp. of Acad. of Sc. USSR, and Odintsova, M. S.

Title

Changes in ribonucleinic acid of plastidae in the process of organism

development

Periodical

Dokl. AN SSSR, 97, Ed. 1, 119 - 120, July 1954

Abstract

The changes in ribonucleinic acid taking place in chloroplastidae and leukoplastidae during the process of organism development, were investigated. Results are given in tables. Eight references: 5 USSR,

2 USA and 1 German.

Institution :

. . . .

Submitted

: May 6, 1954

SIGAKYAN, N. M.

USSR/ Biology - Biochemistry

Card

1/1

Authors

Sisakyan, N. M., Memb. Corres. of Acad. of Sc. USSR, and Smirnov, B. P.

Title

Bond forms between lipoids and protein complex of plastides

Periodical

Dokl. AN SSSR, 97, Ed. 3, 487 - 489, July 21, 1954

Abstract

Scientific data on the bond forms, existing between lipoids and the protein complex of plastides, are presented. The form of inter-metabolisms of various lipoids during the development of the organism was investigated to determine the chemical nature and the biochemical functions of plastides. Four USSR and 2-German references. Table, graph.

Institution : Acad. of Sc. USSR, The A. N. Bakh Institute of Biochemistry

Submitted

: May 18, 1954

515AKYAN, N.M.

Abstract

USSR/Chemistry - Biochemistry

. Pub. 22 - 29/44 Card 1/1

Sisakyan, N. M., Memb. Corresp. of Acad. of Sc. USSR; Bezinger, E. N.; Authors

and Kivkutsan, F. R.

Amino-acid composition of phycoerythrin Title

Dok. AN SSSR 98/1, 111-114, Sep 1, 1954 Periodical The amino-acid composition of phycoerythrin (chromoprotein) derived

from Callithamnion rybosum algae and containing 10.61% of N per dry weight, was investigated. The amino-acids were identified by the method of distributive chromatography on paper. The results obtained are shown in tables. Sixteen references: 8-USA; 3-German

and 5-USSR (1928-1954). Tables; drawings; illustrations.

Acad. of Sc. USSR, The A. N. Bakh Institute of Biochemistry Institution

June 11, 1954 Submitted

SISAKYAH, H.M.

[Biochemical properties of plastids; reports and papers of the Third International Gongress of Biochemistry, Brussels, 1-6 August, Third International Gongress of Biochemistry, Brussels, 1-6 August, Third International Congress plastid; soobshchemia i doklady na 1955. Biokhimicheskie svoistra plastid; soobshchemia i doklady na 1955. Whoklady na 1955. Biokhimicheskom kongresse, Briussel', 1-6 avgusta III Mezhdunarodnom biokhimicheskom kongresse, II Mezhdunarodnom biokhimicheskom kongresse, I

"On the Mature of Changes in Metabolism Under Irradiation Effects," a paper presented at the Atoms for Peace Conference, Genera, Switzerland, 1955

SISALYAM, AM

Application of carbon-14 and phosphorus-32 in studies of the synthetic functions of isolated chloroplasts. N. M. Sisakynta Session Akud. Nank S.S.S.R. on Member 1955, Zasodaniya Ondel. Biol. Nank, 172-82 (English summery) 183).—The use of labeled mols, permitted the establi-binent of participation of isolated chloroplasts in a no. of plant functions, such as incorporation of C*-glycine and glycylglycine into the protein comput, synthesis and oxidation of fatty acids, and introduction of P into phospholipides. C!s. kaleded acctate is incorporated into the fatty acid content of the chloroplasts and adenosinetriphosphate does not affect this process. Incorporation of P into phospholipides occurs only in the proposacion of phospholipides occurs only in the propency of adenytic acid. If references. G. M. K.

USSR/General Division. Congresses. Sessions. Conferences.

Ref Zhur-Biologiya, No 3, 1958, 9309 Abs Jour

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Author

Title

Inst

Some Problems of Radiobiology (on the Results

of the International Conference for the Peace-

ful Use of Atomic Energy)

Orig Pub

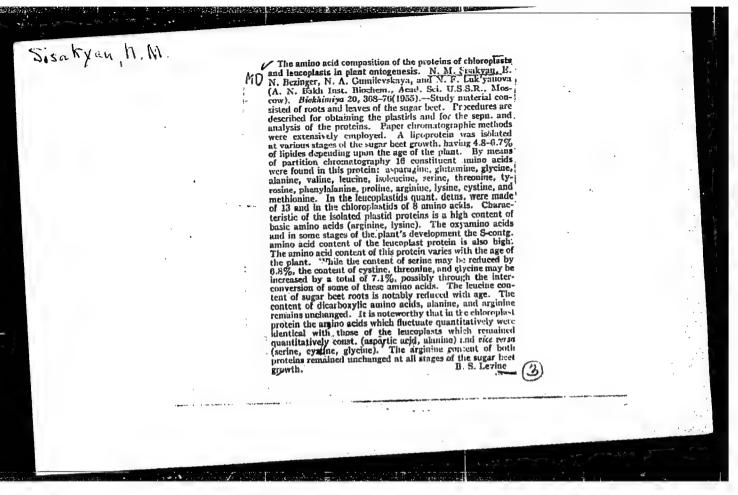
Vestr.AN SSSR, 1955, No 12, 43-51

Abstract

Account of reports on the biological action of radiation in connection with its use in special problems: sterilization of food products; control of pests and parasites; application of radiation in agriculture; utilization of the method of marked atoms in biology and agriculture. See

RZhBiol., 1956, 93484.

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"Biochemistry of metabolism". N.M.Sisakian. Beviewed by
A.N. Belozerskii. Biokhimiia, 20 no.4:511-512 Jl-Ag '55.

(METABOLISM) (SISAKIAN, N.M.) (MLRA 8:12)

KURSANOV, A.L., akademik; SISAKYAN, N.M.

The 8th international botanical congress. Vest. AM SSSR 25 no.4:57-65
(MIRA 8:7)

Ap 155.

1. Chlen-korrespondent AM SSSR (for Sisakyan)
(Paris—Botany—Congresses)

USSR/ Biology - Conferences

1/1 Pub. 124 - 7/25 Card

: Sisakyan, N. M., Memb. Corres., Acad. of Sc., USSR, and Kuzin, A. M., Prof. Authors

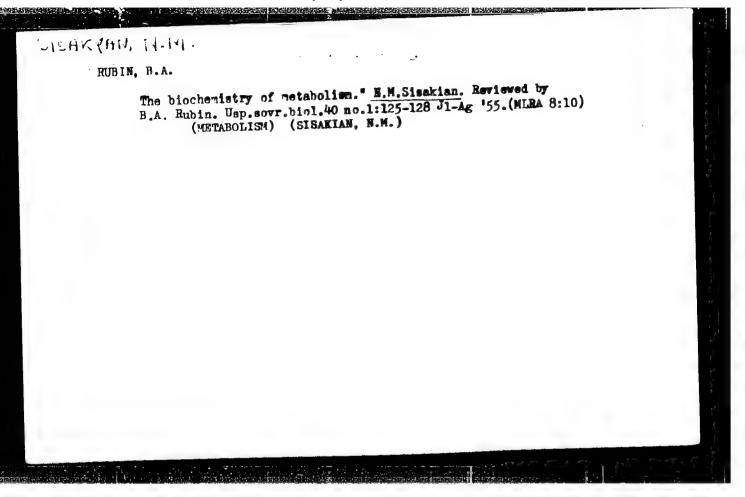
: Certain problems of radiobiology Title

Periodical : Vest. AN SSSR 25/12, 43-51, Dec 1955

! Minutes are presented from the International Conference on peacetime utilization of atomic energy held during August 8-20, 1955, in Geneva, Abstract Switzerland. Various problems of radiobiology and its applications are discussed. One USSR reference (1950).

Institution:

Submitted



"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550910018-1

Sisa Kyan, N. M.

USSR/Biology - Biochemistry

Card 1/1

Pub. 22 - 36/49

Authors

Sisakyan, N. M., Memb. Corresp., Acad. of Sc., USSR; and Veynova, M. K.

Title

The nature of albumina of the nodule liquid of cocoons of mulberry

silkworm (Bombyx Mori)

Periodical : Dok. AN SSSR 101/3, 531-534, Mar 21, 1955

Abstract

An investigation was conducted for the purpose of explaining the nature of albumina of the nodule liquid of a mulberry silkworm and estimation of their quantitative changes during the process of development. The study was carried out by means of an electrophoretic analysis and the results obtained are described. Four references: 1 USSR and 3 French

(1946-1954). Tables; graphs.

Institution : Acad. of Sc., USSR, The A. N. Bakh Inst. of Biochemistry

Submitted

January 1, 1955

USSR/ Biology - Biochemistry

Pub. 22 - 42/62 1/1 Card

: Sisakyan, N. M., Memb. Corresp., Acad. Sc., USSR, and Filipovich, I. I. Authors

s Synthesis of albumin in isolated chloroplastics Title

Periodical : Dok. AN SSSR 102/3, 579 - 582, May 21, 1955

: The conditions favorable for the synthesis of albumin in isolated chloro-Abstract

plastics were investigated and results are described. Fourteen references:

6 English, 1 French and 7 USSR (1935-1954). Tables, graph.

Institution: Acad. of Sc., USSR, The A. N. Bach Inst. of Biochem.

: March 19, 1955 Submitted

SISAKYAN, Norayr Martirosovich, professor, doktor biologicheskikh nauk;

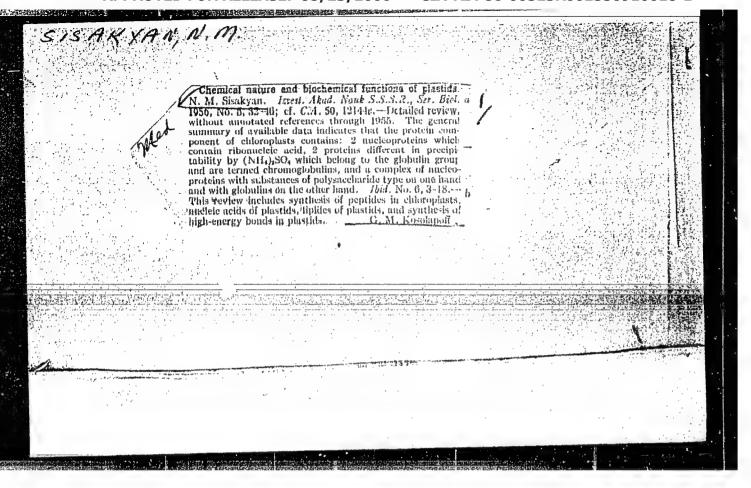
[Modern concepts of metabolism] Soveremennye predstavleniia o biologicheskom obmene veshchestv. Moskva, Izd-vo *Znanie.* 1956. 29 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser. 3. no.33)

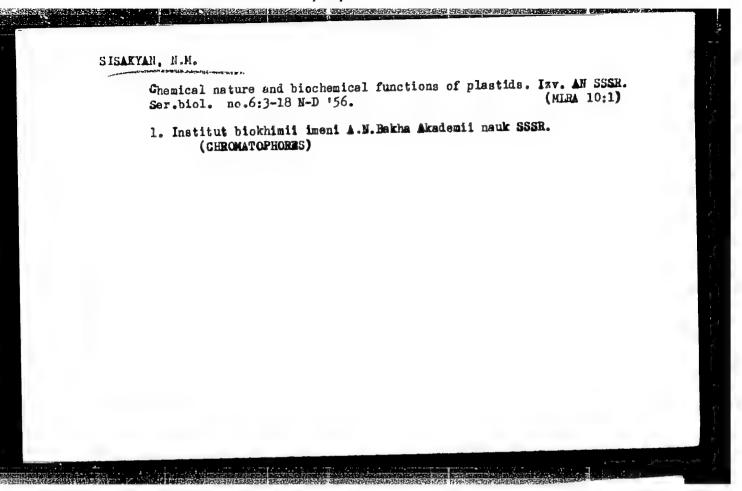
1. Chlen-korrespondent AN SSSR (for Sisakyan).
(METABOLISM)

GEL'MAN, N.S.; ZENKEVICH, G.D.; SISAKYAN, N.M., otvetstvennyy redaktor; CPARIN, A.I., akademik, redaktor; KHRUSHCHOV, G.K., redaktor; GENKEL', P.A., professor, redaktor; GAYSINOVICH, A.Ye., kandidat biologicheskikh nauk, redaktor; SIMKINA, Ye.M., tekhnicheskiy redaktor

[Biochemistry of plants; a bibliography of Russian literature, 1738-1952] Biokhimiia rastenii; bibliograficheskii ukasatel otechestvennoi literatury, 1738-1952. Sost. N.S.Gel'man i G.D.Zenkevich. Otv. red. N.M.Sisakian. Noskva, 1956. 394 p. (MLRA 9:7)

1. Akademiya nauk SSSR. Otdeleniyebiologicheskikh nauk. 2. Chlenkorrespondent AN SSSR (for Sisakyan, Khrushchov) (Bibliography-Botanical chemistry)





SiSAKYAN, N. M.

USSR/General Secrion - Scientific Institutions

A-3

Abs Jour

: Referat Zhur - Biol. No 16, 25 Aug 1957, 67872

Author Title

: The Biochemical Laboratories of Belgium and France

Orig Pub

: Vestn. AN SSSR, 1956, No 10, 61-67

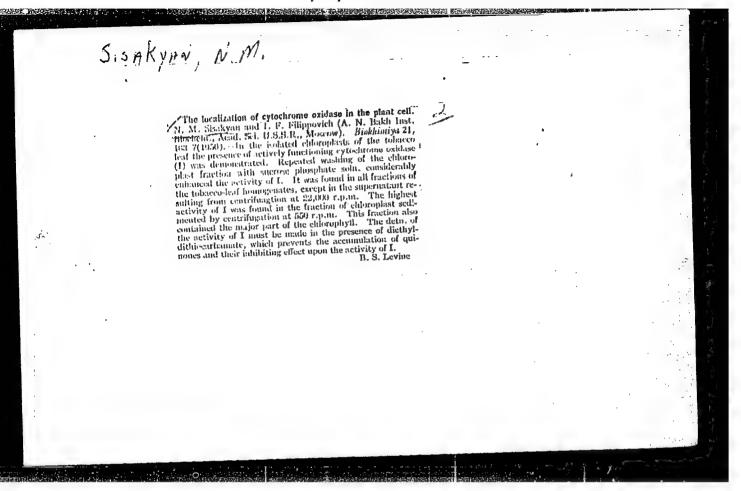
Abstract

: In the Belgian laboratories there is being studied phototropism, photoperiodism in plants, its biochemical mechanism, optimal conditions for artificial growth of crops, changes in amino acid metabolism as a factor in adaptation, initial shifts in the organism under the influence of radiation, and the end results of this influence, etc. Broad studies were carried out in biochemistry of germination and maturation, and in the field of cellular biochemistry, etc. There was noted the clear organization and high degree of automation in the work of the laboratories. The French biochemists are working on problems of sulfur metabolism and its relation to the metabolism of

Card 1/2

- 35 -

CIA-RDP86-00513R001550910018-1" APPROVED FOR RELEASE: 08/23/2000



SISAKYAN, N. H.

The synthesis and oxidation of fatty acids in isolated chloroplasts. N. M. Sisakyan and B. P. Smirnov (A. N. Bakh Inst. Bicchem., Acad. Sci. U.S.S.R., Moscow). Biokhimiya 21, 273-8(1956).—The study materials were red clover, sunflower, sugar beet, and beans. Lipide analyses were made on chloroplasts isolated by method I and chloroplasts from the layer of bean shrouts to be used for red clover, sunflower, sugar beet, and beans. Lipide analyses were made on chloroplasts isolated by method I and chloroplasts from the leaves of bean sprouts to be used for fatty acid oxidation studies were isolated by method II of Sand S(C.4. 50, 12196i). For the study of the synthesis of fatty acids whole chloroplasts were isolated from the cotyledons of sunflower sprouts and from the leaves of bean sprouts. The vegetable material was ground in a porcelain mortar with a K phosphate buffer of pH 6.0 in 0.3M soln. of sucrose. At pH 6.0 the nuclei disintegrated thereby facilitating the isolation of the free chloroplasis.

The homogenate was pressed through linen cloth, slowly centrifuged 4 times for 3 min. to separate the cell fragments and the starch granules, or it was filtered through a No. 1 or No. 2 glass-filter. The supernatant, was then centrifuged at 700 g for 5 min. to bring down the chloroplasts. Sediment was again recurspended in K phosphate buffer of pH 7.0 and again centrifuged at 700 g. The chloroplasts thus isolated constituted 2% of the total of enhancement of the chloroplast in the starch granules, or the plant material used. They were examined by electron; the plant material used. They were examined by electron; the plant material used. They were exalt, from the chloroplasts by the method of S. and S. (C.1. 48, 138207); chloroplast ipides of bean sprouts under similar conditions fatty acid etems, in the lipides were extl. from the carboxyl group oxize higher fatty acids: linoleic, inclenic, and accepted method. Accetate with C'll in the carboxyl group oxize higher fatty acids: linoleic, inclenic, deice, and accepted method. Accetate with C'll in the carboxyl group oxize higher fatty acids: linoleic, linoleic, deice, and encloroplasts. During the incubation of chloroplasts with

USSR/Physiology of Plants. Photosynthesis.

I-2

Abs Jour: Ref. Zhur-Biol., No 1, 1958, 1135.

APPROVED FOR RELEASE: 08/23/2000 Author: Melik-Serkisyan, S.S., Sisakyan, N.S. CIA-RDP86-00513R001550910018-1

Inst : Institute of Biochemistry of the Academy of Sciences USSR

Title : The Nature of Chloroplast Albumins

Orig Pub: Biokhimiya, 1956, 21, No 3, 329-339.

Abstract: In the Institute of Biochemistry of the Academy of Sciences USSR the proteins \propto , $\beta_1, +\beta_2$ and γ were isolated from the leaf chloroplasts of the fourth rosette of sugar beet. The of the chloroplast; the complex $\beta_1 + \beta_2$ comprises from 45% to 60%; the δ component 23.30% \int sic \int . The δ -component is a complex albumen containing nucleic acid and tightly connected with the & component. The & component is a complex of albumen and polysaccharides, containing a series of amino acids,

Card : 1/2

-22-

Sasa Plant Physiology. Respiration and Metabolism.

USSR / General Biology. Physical and Chemical Biology

B-1

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 194

: Sisakyan, N.M., Gumilevskaya, N.A. Author

: Not Given Inst

: On the Transformation of Nucleic Acids in the Metamorphosis Title

Process of the Mulberry Silkworm.

Orig Pub : Biokhimiya, 1956, 21, No 6, 810-815

Abstract : During the metamorphosis period of the mulberry silkworm a

mineralization of P occurs in the chrysalis (C), which reaches its maximum on the 5th day of development (change of histolysis by histogenesis); analogous manifestations are observed in the cavity fluids (CF) of the chrysalis. The content of nucleic acids in C and CF increases at the beginning of greater histolysis and in the period of differentiation, which coincides with an increase in desoxyriboncleic acid DNA content, while the content of ribonucleic acid RNA at first grows markedly

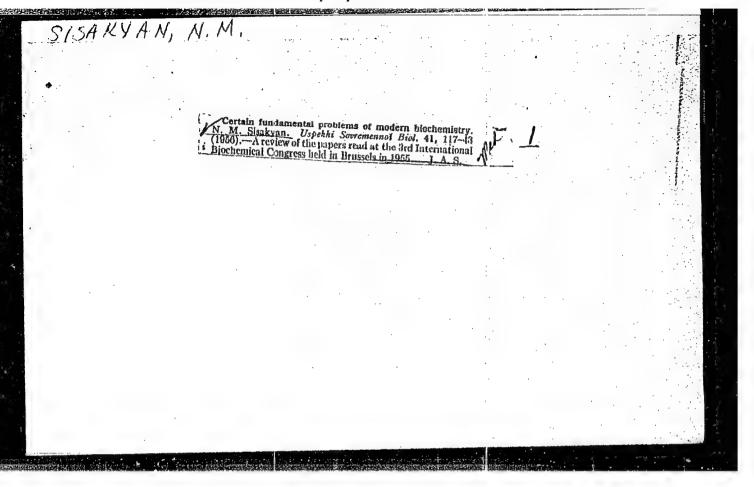
and then gradually decreases from the beginning of histolysis

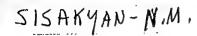
: 1/2 Card

> CIA-RDP86-00513R001550910018-1" APPROVED FOR RELEASE: 08/23/2000

Biochemical laboratories in Belgium and France. Vest. AN SSSR
26 no.10:61-67 0 '56.

1. Chlen-korrespondent Akademii nauk SSSR.
(Belgium-Biological laboratories)
(France-Biological laboratories)





Paths of synthesis of phospholipides in chloroplasts in vitro. N. M. Sisakyan and B. P. Smirnov (A. N. Bakh Biochem. Inst., Moscow). Doklady Akad. Nouk S.S.S.R. 107, 449-51(1956).—Synthesis of phospholipides in kidneybean chloroplasts was followed by means of P¹²-tracer in vitro, after isolation of chloroplasts by particulation of leaves in aq. sucrose and centrifuging. The chloroplasts were incubated in soln. of Na₂HP¹⁰O₄ for desired periods, and the action was stopped by CCl₄CO₄H. Examn. of phospholipide fraction showed that its content varies during the day, being max. during daylight hours; acid-sol. P also follows this pattern. No introduction of P¹³ into phospholipide fraction took place on incubation of chloroplasts with Na₂HPO₄ alone. Addn. of adenylic acid, di-K succinate, glycerol, and Na₂HP¹⁰O₄, however, resulted in incorporation of P¹³ in 2 hr₂. Adenylic acid was found to be the essential component of the mixt. for this reaction.

G. M. Kosolanoff

The state of the s

The Hole of Structurel Elements in the Biochemical Function of the Cell," a paper presented at the International Symposium on the Origin of Life, Moscow, 19-24 Aug 1957.

SISAKYAN N.M. BEZINGER, E.N.

Relation of amino acids and their derivatives to the qualitative features of wine. Biokhim. vin. no.5:7-26 *57. (MIRA 10:6)

l. Institut biokhimii im. A.N. Bakha AN SSSR.
(Wine and wine making--Analysis)
(Amino acids)

SISAKYAH, H.M.; KALACHEVA, V.Ya.

Effect of X-irradiation on protein synthesis in rye sprouts [with summary in English]. Biofizika 2 no.4:480-482 *57. (MIRA 10:9)

1. Institut biokhimii im. A.N.Bekha Akademii nauk SSSR, Moskva (X RAYS--PHYSIOLOGICAL EFFECT) (RYE) (PROTEINS)

SISAKYAN, N.M.; FILIPPOVICH, I.I. Protein synthesis in isolated structures of plant cells [with summery in English]. Biokhimita 22 no.1/2:375-384 Ja-F '57. (MLRA 10:7) 1. Institut biokhimii im. A.N.Bakha Amdemii nauk SSSR, Moskva. (PIANTS, metabolism. protein synthesis in vitro (Rus)) (PROTEINS, metabolism. plant synthesis in vitro (Rus))

SISAKYAN, N.M.: KOBYAKOVA, A.M.

Lipoxidases in isolated plastids [with summary in English].

Biokhimita 22 no.3:516-522 My-Je '57. (MIRA 10:11)

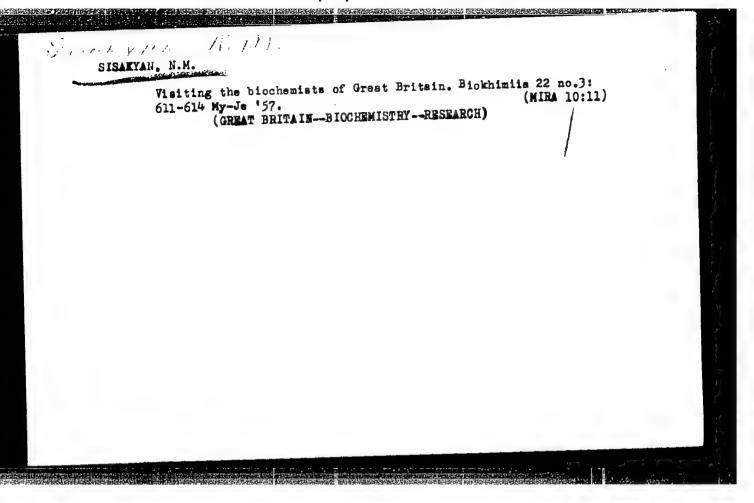
1. Institut biokhimit im. A.N.Bakha Akademii nauk SSSR, Moskva.

(OXIDASES,

lipoxidases in isolated plastids (Rus))

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550910018-1



SISAKYAN N. M

- USSR/General Biology - Physical and Chemical Biology.

в.

: Ref Zhur - Biol., No 21, 94516 Abs Jour

: Sisakyan, N.M., Vasil'yeva, N.A., Spiridonova, G.I.

: Isolation of Nuclei from a Vegative Cell and the Study Author Inst

of Their Properties. Title

: Biokhimiya, 1957, 22, No 5, 813-824. Orig Pub

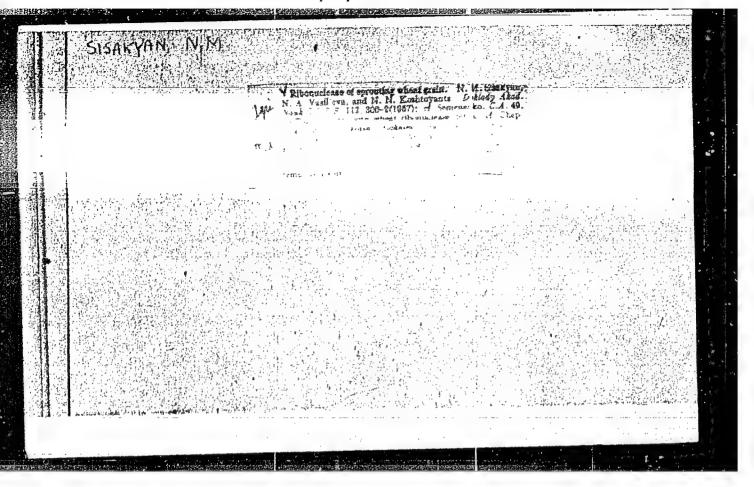
: Nuclar and cytoplasmic fractions from the seed buds of hard and soft wheat were obtained in a saccharosephospha-Abstract

to buffer and in organic solvents by Berens' double Solwent method. With the separation of the maccharose in the solution, judging by the loss of the dehydrase activity, the soluble proteins are lost, which during isolation in the solvents the free lipoids are washed out. In the fractions isolated by means of differential centrifugation in the solvents, the nuclei differ from the cytoplasm by a

lower content of usual and protein N. In the nuclear

Card 1/2

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001550910018-1



SISAKYAN, N.M.; BEKINA, R.M.; MOSOLOVA, I.M.

Cyclophorase activity of the structural elements of vegetable cells. Dokl. AN SSSR 112 no.3:481-484 Ja '57.

(M.RA 10:4)

1. Chlen-korrespondent AN SSSR (for Sisakyan).

(Cyclophorase) (Flant cells and tissues)

AUTHOR: TITLE:

THE RESERVE SISAKYAN, N.M., KUVAYEVA, YG.B. The Influence Exercised by Energy Donors and inhibitors upon the Inclusion of C14-Glycine in the Albumen of the Cavity Liquid

of the Silkworm.

PERIODICAL:

Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 4, pp 873 - 876

(U.S.S.R.)

ABSTRACT:

When investigating the chemism of the processes of metamorphosis the greatest attention is paid to albumin transformation. It was shown that the processes occurring on the occasion of metamorphosis are caused by fermentative processes. Here at first the oxidation reactions are slowed down. This leads to an increase of the reducing processes in the hemolympha. The latter again activates the effectiveness of the proteolytic ferments. Now the authors have demonstrated that the proteolytic activity of the body cavity liquid of a silkworm does not remain constant during the process of metamorphosis. In the stage of decay of the larval organs a distinct proteolysis is observed. At the beginning of histogenesis (formation of the organs of the butterfly) it is relieved by a fall of the proteolytic activity and by a jerky increase of the albumin nitrogen. The latter phenomenon takes place at the expense of the decrease of the non-nitrogen albumin. The authors connect these dislocations in the mutual relation of the single nitrogen forms with the intensified albumin synthesis

Card 1/4

The Influence Exercised by Energy Donors and Inhibitors 20-4-43/61 upon the Inclusion of C¹⁴-Glycine in the Albumen of the Cavity Liquid of the Silkworm.

of enzymes was interrupted by adding 20% trichloro acetic acid (TChE), so that the final concentration was brought up to 9%. The incorporation capacity for glycine C14 is low towards the end of the 25 - 30% cocoon period, whereas it amounts 8 times as much in the period of histogenesis (30 - 65% of the cocoon period). Adding Saccherose only causes an increase of incorporation by 47%, whereas in histogenesis it increases by more than 3 times as much. The causes are the following: 1) Saccherose can have a stabilizing effect by preserving those structures which are necessary for the synthesis of albumin; 2) the energy liberated by the oxidation of saccherose can be used for synthesis processes. The influence of ATPh is especially strong on the reaction environments, probably because of the lack of energy necessary for the synthesis of oxidation systems at that moment. The results on the inhibition of th glycine C14 incorporation into the body cavity proteins give evidence of a connection existing between the oxidizing phosphorylation and the synthesis of albumin. An entirely different impression is obtained when adding WaF. In the stage of hystolysis it has an inhibiting effect, whereas in the histogenesis no delay becomes noticeable. On the contrary, it

Card 3/4

UMFU 4/4

SISAKYAN, N. M.

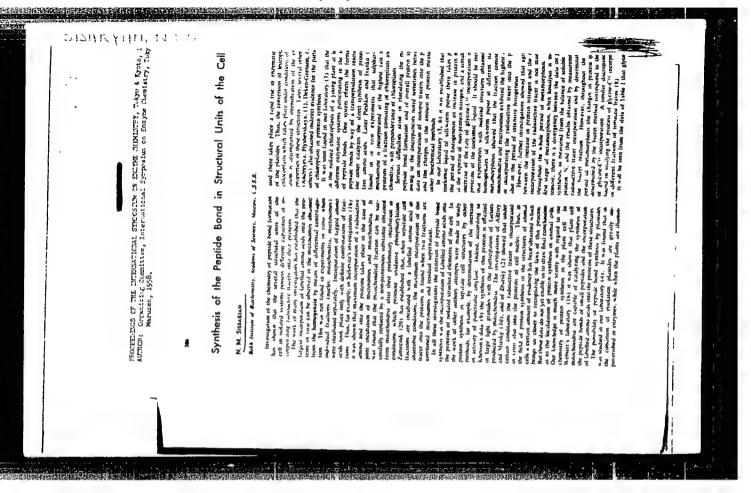
"The Particularity of Protein Synthesis in Plant and Animal Cells."

paper to be presented at 2nd UN Intl.' Comf. on the peaceful uses of Atomic Energy, Geneva, 1 - 13 Sept 58.

The Pecularities of Krebs' Cycle in the Plant Cell."
report submitted IV Intl. Cong. of Biochemistry, VIenna, 1 - 6 Sep 1958.

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550910018-1



SISAKYAN, N. M.

.In the Department of Biological Sciences

30-58-5-14/36

Vost Ak Nauk SSSR, No. 5, p. 60-62, 1958
the importance of an increase in contact of biology with

chemistry.

- 3) G. K. Khrushchov, Corresponding Member, Academy of Sciences, USSR and a number of other speakers also spoke on the necessity of strengthening the contacts between biologists and physicists as well as chemists. He called it an essential disadvantage that the office of the department in its activity mainly restricted to scientific-organizational problems, which was supported by several other speakers.
- 4) A.A. Imshenetskiy, Corresponding Member, Academy of Sciences, USSR, advocated the opinion that the office of the department should take up everything new in science and that it should act as initiator in the posing of new principal scientific problems. He made the proposal to introduce prize competitions for the best works.
- 5) E. A. Asratyan, Corresponding Member, Academy of Sciences, USSR emphasized the one-sided development of physiology in the country and stated that meurophysiology is developed to a very limited extent.
- 6) N. M. Sisakyan, Corresponding Member, Academy of Sciences, USSR emphasized the nedessity of creating connections between the scientific institutions of the department and the councils

Card

1/3

THE PROPERTY OF THE PROPERTY O

In the Department of Biological Sciences

30-58-5-14/36

of national economics. In his closing speech V. A. Engel'gardt Member, Academy of Sciences, USSR agreed to the remarks made by the speakers of the discussion. The plenary assembly elected a new composition of the office. Beside the Secretary V.A. Engel'gardt, Member, Academy of Sciences, USSR whose powers have not yet expired the following persons were elected: The Members, Academy of Sciences, USSR, A. L. Kursanov, Ye. N. Pavlovskiy, V. N. Sukachev, and I. V. Tyurin, as well as the Corresponding members, Academy of Sciences, USSR E. A. Asratyan, P. A. Baranov, V. A. Kovda, Yu. A. Orlov, A. N. Svetovidov, S.Ye. Severin, G. K.Khrushchev, V. N. Chernigovskiy. The following lectures were heard: M. N. Meysel' on new directions in the fluorescence--microscopic investigation of cells, tissues and organs. B. P. Ushakov on the problem of the adaptation of the cells of coldblooded animals to raised temperatures. M.N. Livanov on the investigation of higher nervous activity by the new electro-physiclogical method. M. A. Peshkov on the use of the perfected anoptral microscope in microbiology and protistology. I. S. Beritashvili, Member, Academy of Sciences, USSR showed a popular scientific film on the investigation of the part played by the cerebral cortex of the cerebrum and cerebellum in the spatial orientation of animals.

Card 4/5

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001550910018-1"

Card 3/3

Sisakyan, N. M., Corresponding Member, 30(7) AUTHOR:

A STATE OF THE PROPERTY OF THE

sov/30-58-11-27/48

AS USSR

Soviet Scientists on the Exposition (Sovetskiye uchenyye TITLE:

o vystavke)

Vestnik Akademii nauk SSSR, 1958, Nr 11, PERIODICAL:

pp 100 - 102 (USSR)

In the Palace of Sciences of the Brussels World ABSTRACT:

Exposition biology plays a leading role. Thanks to the use of the most recent techniques of experimentation as well as by collective work great strides have been

made in the field of cell research. The Soviet biologists presented exhibits from the following fields: work in the field of photosynthesis; the study of the mechanism of muscular reaction and the microstructure of nerve-fibers; and the effect of ferments and the movement of materials in plants. Furthermore, the section Viruses, Bacteriophagous Organisms, and Bacteria" was very impressive. The history of this branch was

illustrated, from the very first studies undertaken

Card 1/2

Soviet Scientists on the Exposition

507/30-51-11-27/48

in this field by the Russian scientist D.I. Ivanovskiy, to this day. Moreover, the new Soviet electron microscope. UPID-100 with a recolving power of between 10 and 15 A was exhibited. The author regrets that too little or no attention was given in the Soviet exhibits to the work done by Soviet scientists in the fields of antibiotics, albumin, and such fields of biology as genetics, virology and radiobiology. In contrast with a number of other countries the Soviet Union also failed in showing the cooperation between Soviet biologists, chemists, and physicists. There is 1 figure.

Card 2/2

SISAKYAN, N.M., MELIK-SARKISYAN, S.S., FRENKEL, S.Ya.

Certain physicochemical properties of chloroplast proteins.

[with summary in English]. Biokhimiia 23 no.5:723-736 S-0 '58

[with summary in English]. Biokhimiia 23 no.5:723-736 S-0 '58

[with summary in English]. Biokhimiia 23 no.5:723-736 S-0 '58

[with summary in English]. AN SSSR (MIRA 111)

1. Institut vysokopolimernykh soyedineniy AN SSSR (Leningrad).

(PROTEIN, determ.

in chlorophasts (Rus))

(CHLOROHYLL.

chloroplasts, determ. of proteins (Rus))

Mitocheondrial influence on glycolysis [with summary in English].
Biokhimitia 23 no.61904-908 M-D '58 (MIRA 11:12)

1. Institut biokhimiti imeni A.H. Bakha AM SSSR, Moskva.
(MITOCHONDRIA)
(GINCOLYSIS)

SEMENOV, N.N., akademik; ARBUZOV, A.Ye., akademik; MAMEDALIYEV, Yu.G.;
KARGIN, V.A., akademik; TITOV, N.G., doktor khim.nauk; OBOLENTSEV,
R.D., doktor khim.nauk; IMSHEMETSKIY, A.A.; SISAKYAN, N.M.

Discussion of the report. Vest. AN SSSR 28 no.8:19-26 Ag *58.
(MIRA 11:9)

1. Chlen-korrespondent AN SSSR (for Mamedaliyev, Imshenetskiy,
Sisakyan).

(Chemistry, Organic--Synthesis)

